CLAIMS

We claim:

1.   A method of setting a printing parameter for a print media, the method comprising:

5   obtaining an identifier of the print media;

locating a remote database containing the identifier of the print media and a property of the print media;

downloading the property of the print media; and

utilizing the property of the print media to set the printing parameter.

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2.   The method of claim 1 wherein the obtaining the identifier is performed by a printer.

3.   The method of claim 1 wherein the obtaining the identifier includes

15 obtaining a type of the identifier.

4.   The method of claim 1 wherein the property comprises a size parameter of the print media and wherein the utilizing the property of the print media to set the printing parameter comprises utilizing the size parameter to set printing margins.

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5.   The method of claim 1 wherein the property comprises a subsection parameter of the print media and wherein the utilizing the property of the print media to set the printing parameter comprises utilizing the subsection parameter to render a page.

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6.   The method of claim 5 wherein the utilization of the subsection to render the page comprises creating a preview image.

5   7.   The method of claim 5 wherein the utilization of the subsection to render the page comprises creating a template.

8.   The method of claim 1 wherein the property comprises at least one known color profile of the print media and a known printer, and wherein the utilizing the

10   property of the print media to set the printing parameter comprises locating a matching color profile from the at least one known color profile, wherein the matching color profile is based on the print media and an intended printer, and passing the matching color profile to a color management component.

15   9.   The method of claim 1, wherein the property of the print media comprises a print media black point and a print media white point, and wherein the utilizing the property of the print media to set the printing parameter comprises deriving a new color profile, the deriving comprising:

locating a second color profile in the remote database, wherein the second color

20   profile is based on a second media and a similar printer to an intended printer;

determining a black point difference between a second media black point of the second media and the print media black point;

determining a white point difference between a second media white point of the second media and a print media white point;

determining a total difference between the second media and the print media, wherein the determining the total difference comprises adding the black point difference

5 and the white point difference;

selecting the second color profile to be a best match color profile based on selection factors comprising: the total difference between the second media and the print media;

calculating a translated color profile, wherein the calculating comprises translating

10 a property of a best match print media of the best match color profile; and

calculating the new color profile, wherein the calculating comprises replacing a property of the best match print media with the property of the print media.

10. The method of claim 9 wherein the selection factors further comprise the

15 black point difference.

11. The method of claim 9 wherein the determining the total difference further comprises weighting the black point difference greater than the white point difference.

20 12. The method of claim 9, wherein the property of the print media further comprises a print media tone curve, the method further comprising determining a tone curve difference between a second media tone curve of the second media and the print

media tone curve; and wherein the selection factors further comprise the tone curve difference.

13.   The method of claim 12, wherein the print media tone curve comprises a print media base color tone curve and wherein the tone curve difference is a sum of a base color tone curve difference of each base color of the intended printer, the base color tone curve difference being between a second media base color tone curve of the second media and the print media base color tone curve.

14.   The method of claim 9, wherein the translating the property of the best match print media comprises:

calculating a difference vector comprising a difference between the property of the best match print media and the property of the print media;

interpolating and extrapolating the difference vector to a dimension of a lookup table tag of the best match color profile; and

adding the interpolated and extrapolated difference vector to the lookup table tag of the best match color profile.

15.   A computer-readable medium, having computer-executable instructions for setting a printing parameter for a print media, the computer-executable instructions performing steps comprising:

obtaining an identifier of the print media;

locating a remote database containing the identifier of the print media and a property of the print media;

downloading the property of the print media; and

utilizing the property of the print media to set the printing parameter.

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16.   The computer-readable medium of claim 15 wherein the property comprises at least one known color profile of the print media and a known printer, and wherein the step of utilizing the property of the print media to set the printing parameter comprises locating a matching color profile from the at least one known color profile, wherein the matching color profile is based on the print media and an intended printer, and passing the matching color profile to a color management component.

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17.   The computer-readable medium of claim 15, wherein the property of the print media comprises a print media colorimetric property, and wherein the step of utilizing the property of the print media to set the printing parameter comprises deriving a new color profile, the deriving comprising:

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finding at least one similar color profile in the remote database, wherein the similar color profile is of a similar print media as the print media and a similar printer as an intended printer;

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finding a best match color profile of a best match print media and the similar printer from the at least one similar color profile, wherein the best match color profile minimizes a colorimetric properties difference between a best match print media colorimetric property and the print media colorimetric property;

calculating a translated color profile by determining a difference between the best

match print media colorimetric property and the print media colorimetric property, and

translating the best match color profile to the translated color profile using the determined

difference; and

5   calculating the new color profile by replacing the best match print media

colorimetric property in the translated color profile with the print media colorimetric

property.

18.   The computer-readable medium of claim 15 wherein the property

10   comprises a size parameter of the print media and wherein the step of utilizing the

property of the print media to set the printing parameter comprises the step of utilizing the

size parameter to set printing margins.

19.   The computer-readable medium of claim 15 wherein the property

15   comprises a subsection parameter of the print media and wherein the step of utilizing the

property of the print media to set the printing parameter comprises the step of utilizing the

subsection parameter to render a page.

20.   The computer-readable medium of claim 15 wherein the obtaining the

20   identifier of the print media is performed by a printer

21.   The computer-readable medium of claim 15 wherein the obtaining the

identifier includes obtaining a type of the identifier.

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22.   A computer-readable medium having computer-executable instructions for deriving a new color profile for a print media used in an intended printer, the computer-executable instructions performing steps comprising:

5   locating a second color profile, wherein the second color profile is based on a second media and a similar printer to the intended printer;

determining a black point difference between a second media black point of the second media and a print media black point of the print media;

determining a white point difference between a second media white point of the

10   second media and a print media white point of the print media;

determining a total difference between the second media and the print media, wherein the determining the total difference comprises adding the black point difference and the white point difference;

selecting the second color profile to be a best match color profile based on

15   selection factors comprising: the total difference between the second media and the print media;

calculating a translated color profile, wherein the calculating comprises translating a property of a best match print media of the best match color profile; and

calculating the new color profile, wherein the calculating comprises replacing a

20   property of the best match print media with a property of the print media.

23.   The computer-readable medium of claim 22 wherein the step of determining the total difference further comprises the step of weighting the black point difference greater than the white point difference.

5   24.   The computer-readable medium of claim 22, wherein the steps further comprise determining a tone curve difference between a second media tone curve of the second media and a print media tone curve of the print media; and wherein the selection factors further comprise the tone curve difference.

10   25.   The computer-readable medium of claim 24 wherein the tone curve difference is a sum of a base color tone curve difference of each base color of the intended printer; wherein the base color tone curve difference is between a second media base color tone curve of the second media and a print media base color tone curve of the print media.

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26.   The computer-readable medium of claim 22, wherein the translating the property of the best match print media comprises:

calculating a difference vector comprising a difference between the property of the best match print media and the property of the print media;

20   interpolating and extrapolating the difference vector to a dimension of a lookup table tag of the best match color profile; and

adding the interpolated and extrapolated difference vector to the lookup table tag of the best match color profile.

27.   The computer-readable medium of claim 23, wherein the locating the

second color profile includes searching a database of print media and corresponding

properties.

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28.   A system for setting a printing parameter for a print media, the system

comprising:

a database comprising an identifier of the print media and a property of the print

media; and

10   a program comprising computer-executable instructions for:

obtaining an identifier of the print media;

locating the database;

downloading the property of the print media; and

utilizing the property of the print media to set the printing parameter.

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29.   The system of claim 28 further comprising a printer, wherein the printer

further comprises a sensor for obtaining the identifier of the print media.

30.   The system of claim 28 wherein the obtaining the identifier includes

20   obtaining a type of the identifier.

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31.   The system of claim 28 wherein the property comprises a size parameter of the print media and wherein the utilizing the property of the print media to set the printing parameter comprises utilizing the size parameter to set printing margins.

5   32.   The system of claim 28 wherein the property comprises a subsection parameter of the print media and wherein the utilizing the property of the print media to set the printing parameter comprises utilizing the subsection parameter to render a page.

        33.   The system of claim 32 wherein the utilization of the subsection parameter
10   to render the page comprises creating a preview image.

        34.   The system of claim 32 wherein the utilization of the subsection parameter to render the page comprises creating a template.

15   35.   The system of claim 28 wherein the property comprises at least one known color profile of the print media and a known printer, and wherein the utilizing the property of the print media to set the printing parameter comprises locating a matching color profile from the at least one known color profile, wherein the matching color profile is based on the print media and an intended printer, and passing the matching color
20   profile to a color management component.

        36.   The system of claim 28 wherein the property of the print media comprises a print media black point and a print media white point, and wherein the utilizing the

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property of the print media to set the printing parameter comprises deriving a new color profile, the deriving comprising:

locating a second color profile in the remote database, wherein the second color profile is based on a second media and a similar printer to an intended printer;

5   determining a black point difference between a second media black point of the second media and a print media black point of the print media;

determining a white point difference between a second media white point of the second media and a print media white point of the print media;

determining a total difference between the second media and the print media,

10   wherein the determining the total difference comprises adding the black point difference and the white point difference;

selecting the second color profile to be a best match color profile based on selection factors comprising: the total difference between the second media and the print media;

15   calculating a translated color profile, wherein the calculating comprises translating a property of a best match print media of the best match color profile; and

calculating the new color profile, wherein the calculating comprises replacing a property of the best match print media with the property of the print media.

20   37.   The system of claim 36 wherein the determining the total difference further comprises weighting the black point difference greater than the white point difference.

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38.   The system of claim 36 further comprising determining a tone curve difference between a second media tone curve of the second media and a print media tone curve of the print media; and wherein the selection factors further comprise the tone curve difference.

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39.   The system of claim 36 wherein the tone curve difference is a sum of a base color tone curve difference of each base color of the intended printer; wherein the base color tone curve difference is between a second media base color tone curve of the second media and a print media base color tone curve of the print media.

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40.   The system of claim 36, wherein the translating the property of the best match print media comprises:

calculating a difference vector comprising a difference between the property of the best match print media and the property of the print media;

15   interpolating and extrapolating the difference vector to a dimension of a lookup table tag of the best match color profile; and

adding the interpolated and extrapolated difference vector to the lookup table tag of the best match color profile.

20   41.   A user interface for setting a printing parameter for a print media, the user interface comprising:

an add new media option;

a new media identifier input box;

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a new media identifier type selection;

and a print preview display.

42.   The user interface of claim 41 wherein the add new media option is an

5   option in a pull down menu.

43.   The user interface of claim 41 further comprising a new media identifier

search option, the new media search option comprising: a new media manufacturer input

box and a new media type input box.

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